

each optical signal in the set of temporally distinguishable optical signals having a modulation representation;

a set of optical elements that impart each optical signal in the set of temporally distinguishable optical signals with an optical characteristic enabling each optical signal to be pass through uncorrelated channels in a turbulent medium; and

at least one optical-signal-combining device that combines the set of temporally distinguishable optical signals into a single output beam output for transmission through a turbulent medium.

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendments, claims 1, 3-5 and 7-9 are pending in the application, with 1, 5 and 9 being the independent claims. Claims 2 and 6 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 3-5 and 7-8 are sought to be amended. Claim 9 is sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Rejections under 35 U.S.C. § 102***

The Examiner has rejected claims 1-8 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,278,537 to Miyamori (hereinafter “Miyamori”). Applicant respectfully traverses.

As currently amended claim 1 recites a method for optical wireless communication, including the steps of:

receiving a source data signal having data;

creating a set of temporally distinguishable transmission signals;

converting the set of temporally distinguishable transmission signals to obtain a corresponding set of temporally and optically distinguishable light signals, each light signal having a modulation representation of the data from the source data signal and a respective optical characteristic; and

transmitting the set of temporally and optically distinguishable light signals in a single output transmission beam through a turbulent medium, whereby the set of light signals can pass through uncorrelated channels in the turbulent medium.

Miyamori does not teach or suggest each and every feature of claim 1. For example, Miyamori does not teach or suggest “transmitting the set of temporally and optically distinguishable light signals in a single output transmission beam through a turbulent medium” as claim 1 recites.

Referring to FIG. 3 in Miyamori, Miyamori teaches a “light-signal transfer system” including “a light-signal transmitting apparatus 100 and a light-signal receiving apparatus 150.” *See* Miyamori column 4, lines 56-60. According to Miyamori, a light emitting circuit “emits infrared ray L01 to a space” between light-signal transmitting apparatus 100 and light-signal receiving apparatus 150. *See* Miyamori column 5, lines 35-43. However, Miyamori does not even teach or suggest that “infrared ray L01” includes a set of light signals, let alone “transmitting the set of temporally and optically distinguishable light signals in a signal output transmission beam through a turbulent medium.” That is, Miyamori simply teaches that “infrared ray L01” is a signal light ray, not a “set of light signals [that] can pass through uncorrelated channels in the turbulent medium” as claim 1 recites.

Furthermore, referring to FIG. 7 in Miyamori, Miyamori teaches a “light-signal transfer system” including “a light-signal transmitting apparatus 200 and a light-signal receiving apparatus 250.” *See* Miyamori column 8, lines 26-29. According to Miyamori, light-signal transmitting apparatus 200 emits two spatially separated infrared rays (L02 and L03) in a space between light-signal transmitting apparatus 200 and light-signal receiving apparatus 250. *See* Miyamori column 9, lines 12-22. Hence, Miyamori does not teach or suggest that light-signal transmitting apparatus 200 “transmit[s] the set of temporally and optically distinguishable light signals in a signal output transmission beam through a turbulent medium” as claim 1 recites.

Since Miyamori does not teach or suggest each and every feature of claim 1, this reference cannot anticipate this claim. Furthermore, since claims 3-4 depend from claim 1 (and therefore contain each and every feature of claim 1), Miyamori does not teach or suggest each and every feature of those claims. Accordingly, the Examiner's rejection of claims 1 and 3-4 as anticipated by Miyamori is traversed and Applicant respectfully requests that these rejections be reconsidered and withdrawn.

Claim 5 as currently amended also recites “transmitting the set of temporally and optically distinguishable light signals in a single output transmission beam through a turbulent medium.” Hence, Miyamori does not anticipate claim 5 for at least the same reasons as set forth above with regard to claim 1. Furthermore, since claims 7-8 depend from claim 5 (and therefore contain each and every feature of claim 5), Miyamori does not teach or suggest each and every feature of those claims. Accordingly, the Examiner's rejection of claims 5 and 7-8 as anticipated by Miyamori is traversed and Applicant respectfully requests that these rejections be reconsidered and withdrawn.

By the foregoing amendments, claims 2 and 6 have been cancelled without prejudice to or disclaimer of the subject matter recited therein, thereby rendering the rejection of these claims moot. Accordingly, Applicant respectfully requests that the rejection of claims 2 and 6 be reconsidered and withdrawn.

***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all currently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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